Variability of Languages in Time and Space

Lecture VI
Morphology

- Distinguishing word classes
- Structural typology
- Typology of grammatical categories: Epistemic possibility, Evidentiality, Determination, Head-marking, Number
- Typology of grammatical categories: Case
- Differential object and place markers

Anja Nedoluzhko

Typology in Morphology

- Structural typology
  - How grammatical meanings are built in languages
- Typology of grammatical categories and meanings
  - Which grammatical meanings are possible
  - Which realizations they have in different languages
- Conversely, morphological typology receives relatively little attention
  - Of all the aspects of language, morphology is the most language-specific → least generalizable
  - Word classes are language-specific
  - Even the very presence of a meaningful morphological component is language-specific

Word Classes (POS)

- An integral part of grammar since the Greek/Latin tradition.
  - Dionysios Thrax (217–145 BC) presents and defines eight parts of speech
  - Terms such as ‘noun’ or ‘verb’ are rooted in this tradition
- Define them in a way that fits into the present-day knowledge about the range of cross-linguistic variation
  - Work in progress, no final solution appearing on the horizon

Word Classes (POS)

- nouns
- verbs
- adjectives
- adverbs

open word classes

Cross-linguistically valid criteria for distinguishing word classes can be applied

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- pronouns (personal, possessive, reflexive, reciprocal, demonstrative, relative, interrogative, indefinite)
- articles
- adpositions
- conjunctions
- numerals
- classifiers (with their different subtypes)
- interjections

POS: Criteria for Distinguishing

semantic	pragmatic/discourse	formal	lexical vs. syntactic

- Most approaches to word classes are based on semantic criteria like object, property, or action
- Notional description of nouns and verbs
  - A verb is […] 'a temporal' predication in the sense of following a situation, state by state, as it evolves through conceived time (Langacker 1987: 74)
  - A noun designates a set of interconnected entities
- Does not provide a discovery procedure for POS identification
- Semantic criteria are too general to match word classes across languages

POS: Criteria for Distinguishing

semantic	**pragmatic/discourse**	formal	lexical vs. syntactic

- Distinction between nouns and verbs is related to discourse function
  - Characteristic features of prototypical N's and V's are […] derivative of (and perhaps even secondary to) their discourse roles' (Hopper and Thompson 1984: 708)
- Nouns (referents)
  - Introduce participants and properties and deploy them
- Verbs (predicates)
  - Assert the occurrence of an event
  - An answer to the question 'What happened?

POS: Criteria for Distinguishing

semantic	pragmatic/discourse	**formal**	lexical vs. syntactic

- Inflectional morphology
- Derivational morphology
- Syntactic distribution
- Phonological form
  - Distinct word classes take phonologically different forms whose structure cannot be characterized in a general way (e.g. English *speech* vs. *speak* or *die* vs. *death*)
  - Lexemes within each class have different phonological properties (e.g. nouns are monosyllabic, verbs are disyllabic)

} *function-indicating morphosyntax*

POS: Criteria for Distinguishing

semantic	pragmatic/discourse	formal	lexical vs. syntactic

- Sasse (1993, 1993), Broschart (1997):
  - The confusion of the lexical (paradigmatic) and the syntactic (syntagmatic) levels as a problem for an adequate distinction of word classes
  - Erroneous belief that languages universally display a perfect X:XP match (where X is a “lexical”, XP a “phrasal” category)

Universality of the Distinction

- The difference between denotational and non-denotational words seems to be universal
  - But there are languages with no noun/verb distinction (Sasse 1993)

Classical Nahuatl

ø$_i$-qui$_j$-cua	in	ø$_i$-*piltōntli*	in	øj-nacatl
‘S/he eats it.’		‘It is a child.’		‘It is meat.’

Other Word Classes

- Adjectives
  - Property-denoting lexemes in the function of modification,
  - Often specified for degree
  - There are languages without adjectives (Chinese [$\rightarrow v$], Quechua [$\rightarrow n$])
- Adverbs
  - Modifiers of constituents other than nouns (mostly verbs and adjectives, with some exceptions)
    - *very fast, extremely clever* but also *during his stay here*
  - Much more heterogeneous class
  - Traditionally sub-classified into four semantic groups: local, temporal, modal or manner, and causal

References to POS classification

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Structural Typology

- How grammatical meanings are built in languages
- Approach to structural typology
  - holistic approach: global characterization of the entire language according to a small number of typological characteristics.
    - too ambitious,
  - partial typology:
    - moving away from classifying languages into ideal types
    - specific phenomena or individual grammatical constructions are studied
- Distribution of structures in the world
  - What's where why?

Parameters of Variation

- Stems and Affixes
  - What combinations of stems and affixes are possible in a language?
- Separatist vs. cumulative affixes
  - Does an affix has one or more meaning at the same time?
- The form of morphemes
  - Segmental morpheme, operations (e.g. reduplication), suprasegmentals
- Monosemous vs. polysemous affixes
- Invariance vs. variance of affixes
  - Declination classes
- Overt vs. zero affixes
  - What kind of affixes have overt forms and what kinds are zero?
- The order of morphemes
  - e.g. *stem – deriv – number – case*

	SINGULAR			PLURAL			German
	MASC	FEM	NEUT	MASC	FEM	NEUT	
NOM	*der*	*die*	*das*	*die*	*die*	*die*	
ACC	*den*	*die*	*das*	*die*	*die*	*die*	
GEN	*des*	*der*	*des*	*der*	*der*	*der*	
DAT	*dem*	*der*	*dem*	*den*	*den*	*den*	

	'woman'	'student'	'money'	Serbo-Croatian
NOMINATIVE:	*žèn-**a***	*student-**0***	*nòvac-**0***	
ACCUSATIVE:	*žèn-**u***	*student-**a***	*nòvac-**0***	
GENITIVE:	*žèn-**e***	*student-**a***	*nòvc-**a***	
DATIVE:	*žèn-**i***	*student-**u***	*nòvc-**u***	
INSTRUMENTAL:	*žèn-**om***	*student-**om***	*nòvc-**em***	

	'cupboard'	'Matti'	'school'	Finnish
NOMINATIVE:	*kaappi-**0***	*Matti-0*	*koulu-**0***	
GENITIVE: ('of')	*kaapi-**n***	*Mati-**n***	*koulu-**n***	
ELATIVE: ('from')	*kaapi-**sta***	*Mati-**sta***	*koulu-**sta***	
ADESSIVE: ('at')	*kaapi-**lla***	*Mati-lla*	*koulu-**lla***	
INESSIVE: ('in')	*kaapi-**ssa***	*Mati-**ssa***	*koulu-**ssa***	

	SINGULAR	PLURAL
LATIN:	*uxor* 'wife'	*uxor-**es*** 'wives'
SOUTHERN BARASANO:	*kahe-**a*** 'eye'	kahe 'eyes'
SWAHILI:	***ki**-su* 'knife'	***vi**-su* 'knives'
MANDARIN:	*ren* 'man'	*ren* 'men'

Monosemous vs. polysemous affixes

Invariance vs. variance of affixes

Overt vs. zero affixes

Moravcsik (2013)

Agglutinating morphology

- A word may consist of more than one morpheme
- The boundaries between morphemes in the word are always clear-cut

Turkish

	Singular	Plural
Nominative	*adam*	*adam-lar*
Accusative	*adam-ı*	*adam-lar-ı*
Genitive	*adam-ın*	*adam-lar-ın*
Dative	*adam-a*	*adam-lar-a*
Locative	*adam-da*	*adam-lar-da*
Ablative	*adam-dam*	*adam-lar-dam*

adam 'man'

- Frequent in Turkish, Indonesian, Eskimo, Hungarian, Japanese, Basque...

Isolating | Agglutinating | **Fusional** | Polysynthetic

Analytical

(flective, inflective)

Fusional morphology

- no clear-cut boundaries between morphemes
- alternations

Czech

ruk-a ‘hand’

ruc-e ‘hand’
(N.Pl, Lok&Dat. Sg)

ruč-n-í ‘hand’ (adj.)

- the expression of different categories within the same word is fused together to give a single unsegmentable morph

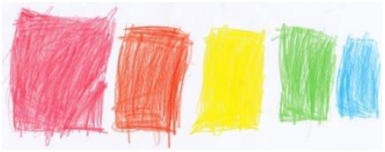
*Marie sp - **í***
‘Mary’ ‘sleep’ – 3.pers.+SG+present
‘Mary is sleeping.’

- restrictions to morpheme combinations

*přátel-**é*** *politic-**i*** *vítěz-**ové***
‘friends’ ‘politicians’ ‘winners’
Nom+Plural

Isolating and Analytical morphology

- Grammatical meanings are expressed with function words
  - One word – one morpheme
- More of isolation → Less of morphology
- Very important word order
- Many compound words



Vietnamese

Khi tôi đèn nhà ban tôi, chúng tôi bắt đầu làm bài.

when I come house friend I plural I begin do lesson

"When I came to my friend's house, we began to do lessons."

Isolating | Agglutinating | Fusional | Polysynthetic

Analytical

Analytical vs. Fusional morphology

Classical Chinese

明天	我	的	朋友	會	爲	我	做	一	個	生日	蛋糕
明天	我	的	朋友	会	为	我	做	一	个	生日	蛋糕
míngtiān	wǒ	de	péngyou	huì	wèi	wǒ	zuò	yí	ge	shēngri	dàn'gāo
tomorrow	I	(possessive particle)	friend	will[1]	for	I	make	one	(count. word)	birthday[2]	cake

Tomorrow my friend (my friends) will make me a birthday cake.

EN. The dog of my father is barking.
def. Gen. poss. praes. actual

CZ. Tatínkův pes štěká.
farther+poss dog+NomSg bark+praes.

Polysynthetic morphology

- Lexical morphemes are combined together into a single word
- Words are composed of many morphemes that have independent meaning
- Long "sentence-words”
- High morpheme-to-word ratio
- Morpheme and word boundaries are not clear cut
- Subject may be separated, but the rest stays very close

Isolating | Agglutinating | Fusional | **Polysynthetic**

Analytical

Polysynthetic morphology

In Paleosiberian Eskimo-Aleut languages:

Chukchi

təmeyŋəlevtəpəɣtərkən

tə|meyŋə|levtə|pəɣt|ərkən
1.SG -'big'-'head'-'ache'-IMPF
'I have a fierce headache'

Yupik *tuntussuqatarniksaitengqiggtuq*

'He had not yet said again that he was going to hunt reindeer.'

Greenlandic

Aliikusersuillammassuaanerartassagaluarpaalli.

aliiku-sersu-i-llammas-sua-a-nerar-ta-ssa-galuar-paal-li

entertainment-provide-SEMITRANS-one.good.at-COP-say.that-REP-FUT-sure.but-3.PL.SUBJ/3SG.OBJ-but

'However, they will say that he is a great entertainer, but …'

Turkish – Latin – English

Given Turkish word forms and their translations into Latin and English

yazmışım	—	I've probably written
yazmışsın	—	You$_{sg}$ have probably written
yazmış	—	He has probably written
yazmışsınız	—	You$_{pl}$ have probably written
yazar	—	(he) writes
yazarlar	—	(they) write

çalışırım	—	laboro
çalışır	—	laborat
çalışırsın	—	laboras
çalışırlar	—	laborant
çalışırsınız	—	laboratis
yazarsın	—	scribis

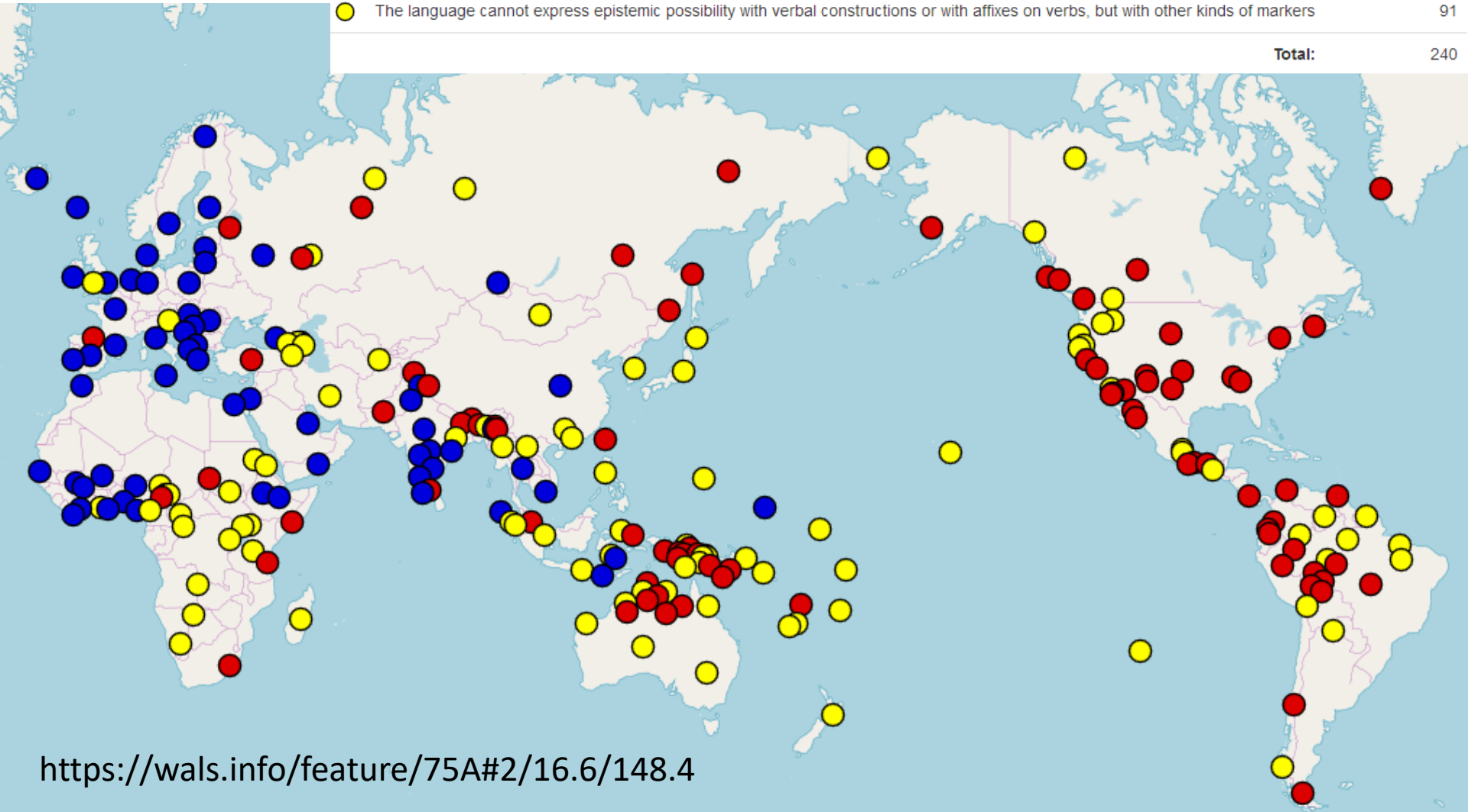
Translate:
into Turkish: scribo, They have probably written
into Latin: (he) writes, yazarsınız
into English: scribitis, yazmışlar

Typology of grammar

- Not universal, but many categories are present in a big number of languages
- Verbs
  - temporal categories, aspect, modality, epistemic possibility, evidentiality, causality, (gender)
- Nouns
  - syntactic meanings (agreement classes, case, head-marking)
  - semantic meanings (number, determination, possessivity)

Epistemic Possibility

The language can express epistemic possibility with verbal constructions	65
The language cannot express epistemic possibility with verbal constructions, but with affixes on verbs	84
The language cannot express epistemic possibility with verbal constructions or with affixes on verbs, but with other kinds of markers	91
Total:	240



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Evidentiality

- In Turkish: a distinction is made between witnessed past (the morpheme *-di*) and unwitnessed (*-miş*)

(8) Turkish

a. *Ahmet* *gel-di.*

Ahmet come-PST.DIR.EVD

'Ahmet came.' (witnessed by the speaker)

b. *Ahmet* *gel-miş*

Ahmet come-PST.INDIR.EVD

'Ahmet came.' (unwitnessed by the speaker)

- evidential-type information through modal verbs

  in germanic languages - Dutch: *zouden*, Danish: *skulle*, German: *sollen*

- Maps in WALS https://wals.info/feature/78A#2/16.6/149.8

Determination

- Abstract meaning (words in dictionary, lists) → Realization in text
  - By noun phrases: Specific and non-specific NPs
  - By specific NPs: Definite and indefinite NPs
  - By definite NPs: Textual and situational definiteness (e.g. some Frisian and German dialects have distinct markers for textual and situational definiteness)
- The meaning of definiteness seems to be universal, but not the grammaticalisation
  - Articles

Determination and Referentiality

Marking referentiality	Marking definiteness
> languages (Turkic, Iranian, many African)	< languages (west-European)
The meaning must not be expressed by extra morphemes, may be reflected in grammar (e.g. case and number may be expressed only by referential nouns)	• both specific and non-specific NPs are classified according to definiteness, without non-specifics being classified into a special group. • often expressed by clitics → not always grammaticalized
Bantu > Bemba: indefinite prefix of class&number marker: i-ci-tabo - 'a book, non-specific' ci-tabo - 'specific, definite or indefinite book'	English: A teacher should be patient. vs. The telephone was invented by Alexander Bell. vs. Ø Gentleman should never insult Ø woman. German: Das Auto ist des Deutschen liebstes Kind. vs. Die Heuschrecke ist ein Insekt.

Head-marking (Ezāfe)

- Other strategy of dependency marking (vs. case, e.g. *dům otce, otcův dům, velký dům*)
- Typical for Iranian, Turkish, Semitic, Fino-Ugric, etc. languages

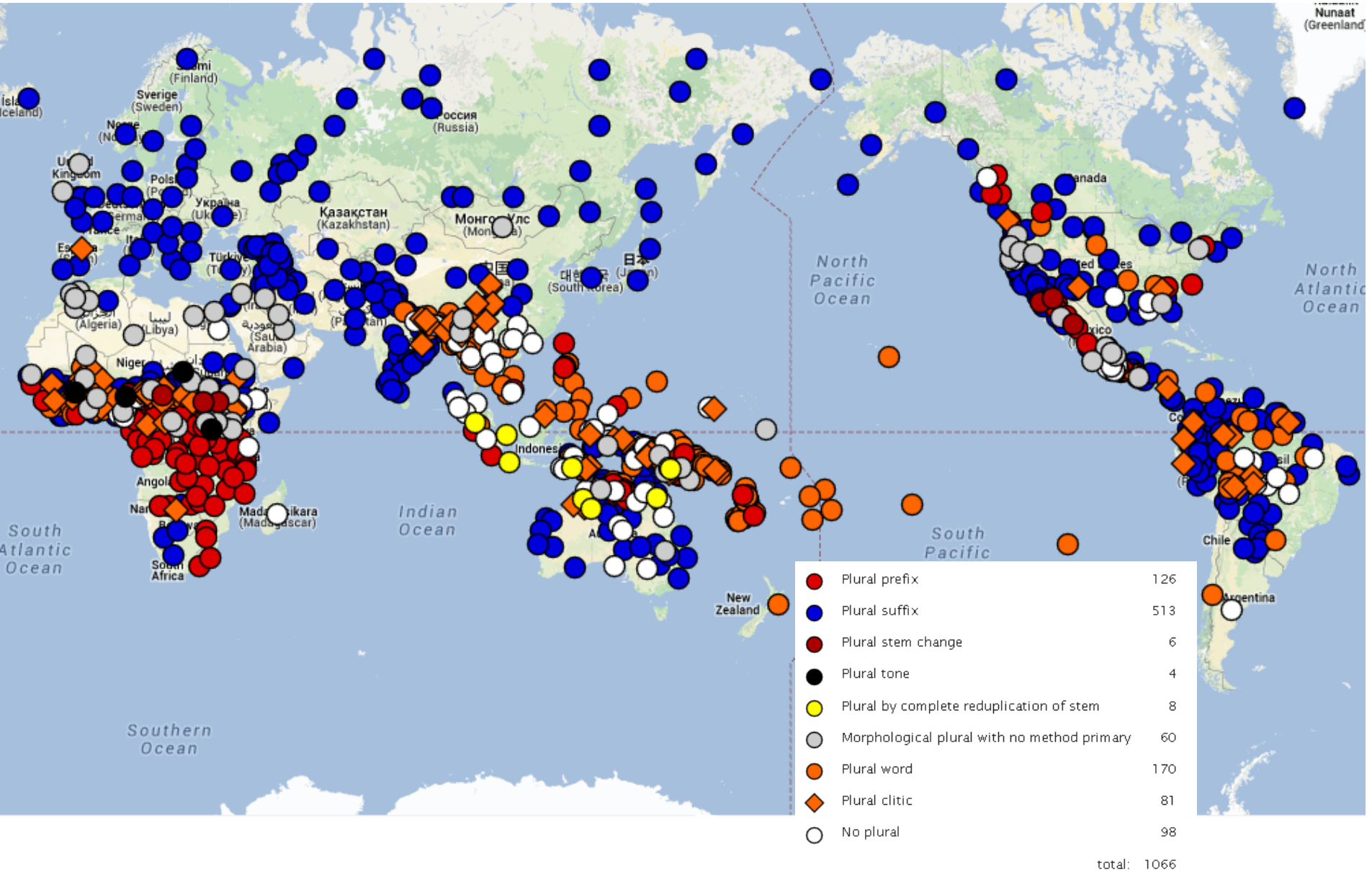
Persian

a.	sänduq-e	doxtär		‘girl’s (suit)case’
	case - izf	girl		
b.	sänduq-e	män		‘my (suit)case’
	case - izf	I		
c.	sänduq-e	qäšäng		‘nice (suit)case’
	case - izf	nice		
d.	sänduq-e	qäšäng-e	doxtär	‘girl’s nice (suitcase)’
	case - izf	nice - izf	girl	
e.	sänduq-e	doxtär-e	qäšäng	‘nice girl’s (suit)case’
	case - izf	girl- izf	nice	

Number

- Grammatical category of nouns, pronouns, adjectives, and verb agreement
- Expresses count distinctions
- Most often: singular vs. plural, but there are aso
  - *dual*, (Lithuanian, Arabic, Maltese, Icelandic, Old Church Slavonic, Slovenian, Sorbian)
  - *trial* (Tok Pisin, Tolomako Lihir) (Papua New Guinea)
  - *paucal* number (old Arabic, some languages of Papua New Guinea
- Very rare úplně numerical uncertainty system
  - one – more than one – indefinite number in some): některé African languages

Expression of Nominal Plurality



Expression of Nominal Plurality

Reduplication — Indonesian

rumah	‘house’	rumah-rumah	‘houses’
perubahan	‘change’	perubahan-perubahan	‘changes’

Special word — Hawaiian

‘elua	a‘u	mau	i‘a
two	my	pl	fish
‘my two fishes’			

(Oceanic Group of Australian Family)

Tones — ngiti (Sudan)

kamà	‘chief’	kámá	‘chiefs’
màlàyikạ̀	‘angel’	màlàyíká	‘angels’
màlimò	‘teacher’	màlímó	‘teachers’
adɔ̀du	‘my brother’	adɔ́du	‘my brothers’

Prefixation — Anindilyakwa

wirr-iyikwayiwa
pl-child
‘children’

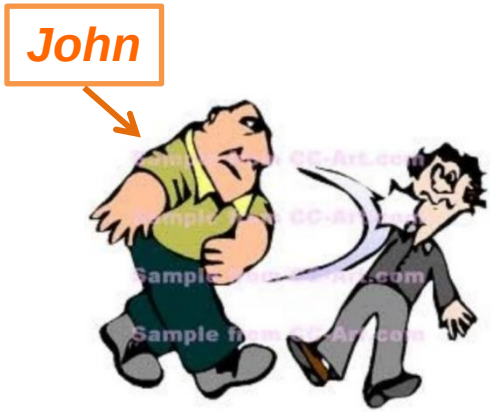
(North Australia)

Change in the root — Maricopa, USA

humar	‘child’	humaar	‘children’
nchen	‘older sibling	nchiin	‘older siblings’
hat	‘dog’	haat	‘dogs’
mhay	‘boy’	mhaa	‘boys’

Nominal Cases

- Syntactic: express grammatical relations (subject, object, oblique…)
  - Subject (≈ ACTor in PDT)
  - Object (≈ PATiens in PDT)
  - Indirect Object, oblique (≈ ADDRessee in PDT)
  - Other (≈ ORIG, EFF in PDT, Instrument)



- Semantic (Thematic roles, Semantic roles)
  - Ch. Fillmore (1968, 1971)
  - Express conceptual notions (agent, patient, instrument…)
  - Example: If someone named John purposely hits someone named Bill, then John is the *agent* and Bill is the *patient* of the hitting event.
    - *John hit Bill.*
    - *Bill was hit by John.*

} In both of sentences, *John* is the agent.

Semantic Roles

- Semantic roles do not correspond directly to grammatical relations.
- Notice what varying semantic roles a subject can play:

Sentence	**Grammatical relation**	**Semantic role**
Bob opened the door with a key.	*Bob* = SUBJECT	*Bob* = AGENT
The key opened the door.	*The key* = SUBJECT	*The key* = INSTRUMENT
The door opened.	*The door* = SUBJECT	*The door* = PATIENT

Examples of Semantic Roles

- Agent: The 'doer' of the action denoted by the predicate
- Patient: The 'undergoer' of the action or event
- Experiencer: The living entity that experiences the action or event
- Goal: The location or entity in the direction of which something moves
- Benefactive: The entity that benefits from the action or event (*John helped Susan to buy her first car*)
- Causer: The referent which instigates an event rather than actually doing it (*The rain destroyed the crops*)
- Source: The location or entity from which something moves
- Instrument: The medium by which the action or event is carried out
- Locative: The specification of the place
- Recipient: Argument that receives something (*I paid my landlord the rent*)

Semantic Roles: Patient

- Also known as *affected, undergoer*
- The entity undergoing a change of state or location, or which is possessed, acquired or exchanged, a person who experiences an event, the thing or person that is affected by an event
  - The entity predicated with a state or location:
    - *The door is open.*
    - *John is at home.*
  - The entity undergoing a change of state or location:
    - *He opened the door.*
    - *The door swung open.*
    - *He threw the ball across the yard.*
    - *The ball rolled off the table*.
  - The entity which is possessed, acquired, or exchanged:
    - *John has a new book.*
    - *John bought a new book.*
    - *John gave Mary a new book.*

John hit Bill.
The dog ate the meat.
Mary became sad.

Benefactive, Recipient, Addressee: Syntactic and Semantic Realization

- Languages use grammatical case markers to distinguish semantic roles
- Many roles vs. not so many grammatical markers for cases → roles are combined
- Example: Semantic roles Benefactive, Recipient and Addressee are mostly combined and use Dative, BUT
  - in Sanskrit Accusative is used for the Addressee and Dative is used for Benefactive and Recipient
  - in Dravidian languages: there is a special case for Benefactive, while Recipient + Addressee + Patient get Accusative

Semantic Roles: Comitative

Relationship of "accompaniment“: "in company with", "together with"

John washed the car <u>with Mary</u>.

Estonian suffix “-ga”

ja	Barber	rüüpa-b	koos	Balthasari-ga	sügava	sõõmu
and	Barber	drink-3.SG	together	Balthasar-COM	deep.GEN	mouthful.GEN

And Barber takes a sip together with Balthasar.

Chukchi circumfix

а'ачек	ӈытоскычат-гьэ	га-мэлгар-ма
boy	ran.out-PERF	COM.PRED-gun-COM.PRED

The boy ran out with a gun

Hungarian suffix “-stul/-stül,”

ruhá-stul	és	cipő-stül	feküd-t-em	az	ágy-ban
clothes-COM	and	shoe-COM	lie-PAST-INDEF.1.SG	the	bed-INE

I was lying in bed with my clothes and shoes on.

Semantic Roles: Abessive

(caritive and privative)

- The lack or absence of the marked noun

  John washed the car without Mary.

- Especially used in Uralic languages

Finnish

raha "money“
rahatta "without money“
ilman rahaa "without money"

Hungarian

pénz "money“
pénztelen "without money“
haza "home(land)“
hazátlan "(one) without a homeland"

Locative Cases

Basic Localization	Case	Some combinations in Hungarian
IN – inside	LOKATIVE=ESSIV E (where, LOC)	Inessive
APUD – near		Elative
SUB – under	ABLATIVE=ELATIVE (from where, DIR1)	Illative
SUPER – over		Superessive
POST – behind		Delative
AD – on surface	LATIVE=DIREKTIVE (to where, DIR3)	Sublative
CIRKUM – around		Adessive
ULTRA – far from		Ablative
		Allative

Given Alutor words and their English translations:

kujŋətenək	near to the glass
raralqək	on the roof
raraɣiŋəŋ	into the basement
aŋqakin	from the sea
aŋqan	the sea
keŋən	the bear
keŋəlqəkin	from the bear
raralqən	the roof
kujŋəŋ	into the glass
keŋək	inside the bear
aŋqatenək	on the beach

Translate into Alutor:

the basement, inside the house, the glass, from the roof, to the bear

Number of Cases

Old French (*roy -'king'*)

Direct:	roy-s	roy-0
Oblique:	roy-0	roy-s

2

Hungarian (*hajó - 'ship'*)

Nominative:	hajó
Accusative:	hajó-t
Inessive:	hajó-ban
Elative:	hajó-ból
Illative:	hajó-ba
Superessive:	hajó-n
Delative:	hajó-ról
Sublative:	hajó-ra
Adessive:	hajó-nál
Ablative:	hajó-tól
Allative:	hajó-hoz
Terminative:	hajó-ig
Dative:	hajó-nak
Instrumental-Comitative:	hajó-val
Formal:	hajó-képp
Essive:	hajó-ul
Essive-Formal(-Similitive):	hajó-ként
Translative-Factitive:	hajó-vá
Causal-Final:	hajó-ért
Distributive:	hajó-nként
Sociative:	hajó-stul

19

Iceland (horse)

Nominative:	hest-ur
Accusative:	hest
Genitive:	hest-s
Dative:	hest-i

4

Khanty (Ural; west Siberia) (*xo:t - 'house'*)

Direct:	xo:t
Locative:	xo:t-na
Translative:	xo:t-ti

3

Trumai, Brazil (child)

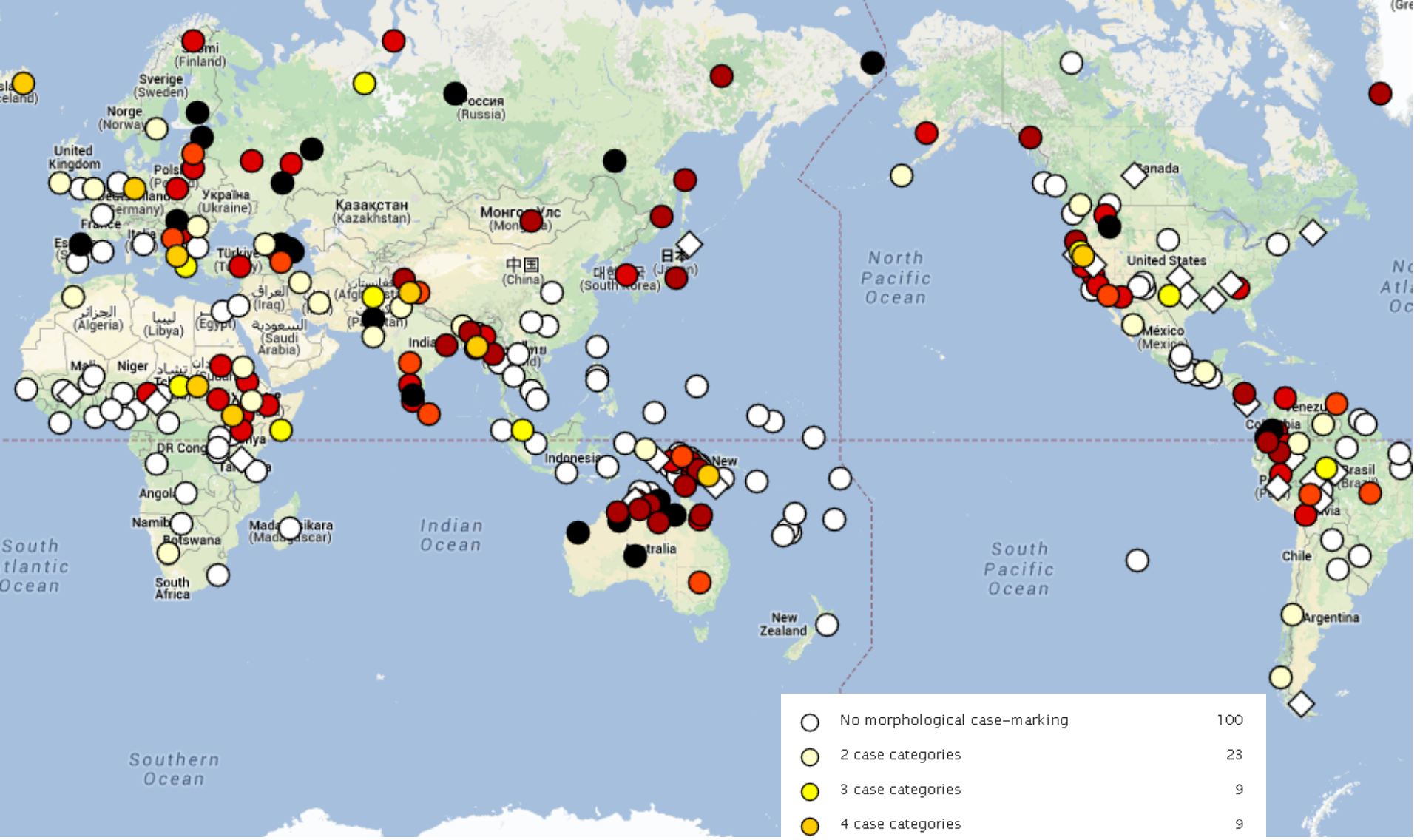
Absolutive:	axos
Ergative:	axos-ak
Dative:	axos-atl, axos-ki
Genitive:	axos-kate
Locative:	(esak-en)

5

Russian (*zavod – 'factory', karta – 'map'*)

Nominative:	zavod	kart-a
Accusative:	zavod	kart-u
Genitive:	zavod-a	kart-y
Dative:	zavod-u	kart-e
Instrumental:	zavod-om	kart-oj
Locative:	zavod-e	kart-e

6



○	No morphological case-marking	100
○	2 case categories	23
○	3 case categories	9
○	4 case categories	9
○	5 case categories	12
○	6–7 case categories	37
○	8–9 case categories	23
○	10 or more case categories	24
◇	Exclusively borderline morphological case-marking	24
	total:	261

Number of Cases

Expression of Case

Prefixes — Krongo (centr.Afrika)

àpá-ŋ	ìʔìŋ	á-kùufì
m.perf.hit-tr3sg.m		instr-baton

‘He hit him with a baton.’

Proklitic — Cayuvava (Bolivia)

ji=[ka'reeča	datï]
obl=[other	place]

‘in another place’

Tone — Nandi (Kenya)

a.	kè:r-éy	kípe:t	la:kwé:t
	look.at-impf	Kipet.subj	child.nonsubj

‘Kibet is looking at the child.’

b.	kè:r-éy	kipe:t	kípro:no
	look.at-impf	Kipet.nonsubj	Kiprono.subj

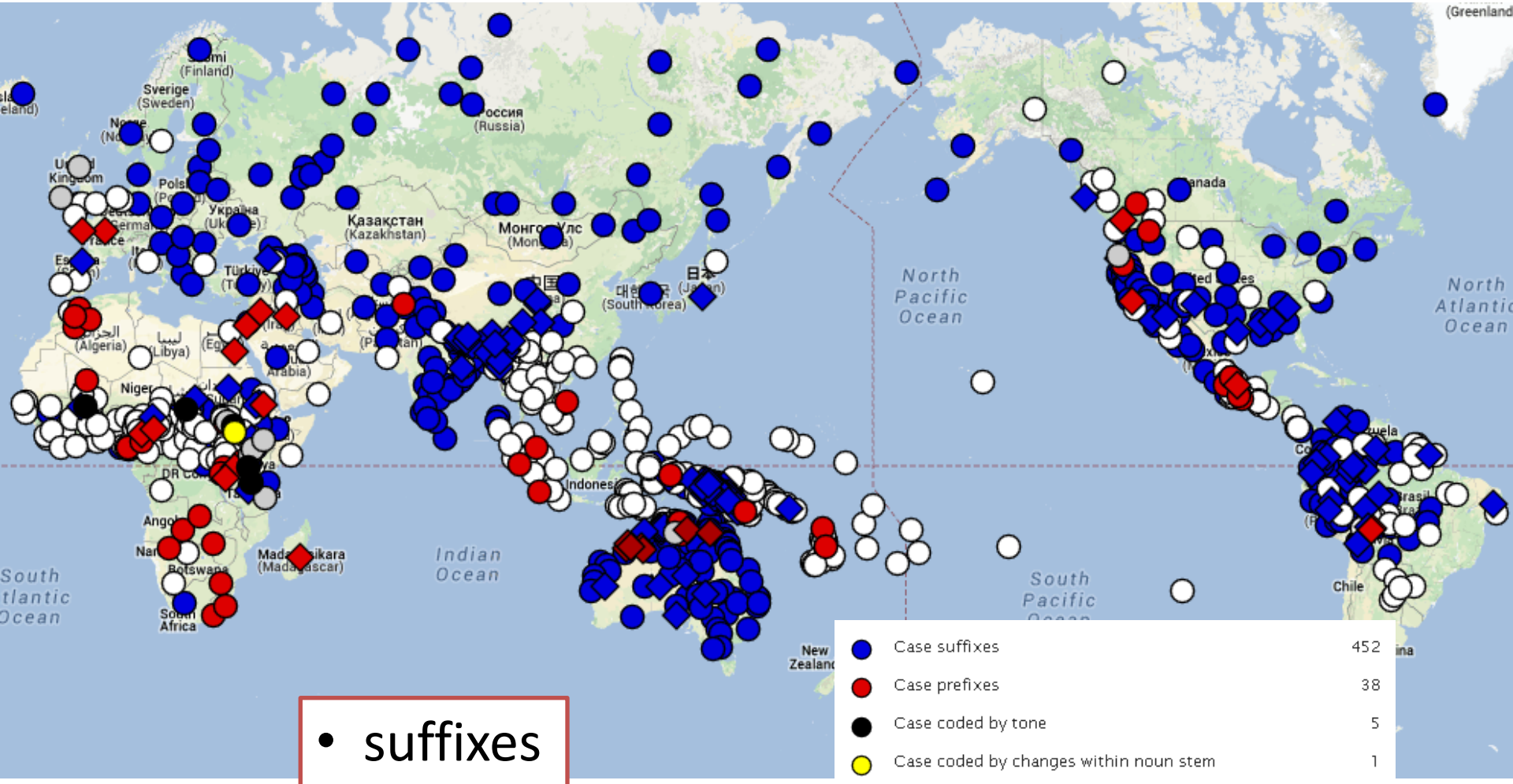
‘Kiprono is looking at Kibet.’

Enklitic — Ungarinjin (Australie)

[dambun	budaga]=ṛa
[camp	their]=loc

‘at their camp’

Position of Case Affixes



- suffixes
- prefixes
- tones
- clitics

Differential Object Marking (DOM)

- In non-DOM languages, all direct objects are uniformly marked in the same way: a language could mark all direct objects with Acc (Czech); or leave all direct objects without overt marker (English).
- Direct objects are divided in two different classes, depending on different meanings
- Mostly, only one of the classes receives a marker, the other remains unmarked
  - or (like in Finnish) both types of objects are marked with different endings
- e.g. in Spanish, Persian, Turkish, Tamil, Hebrew

DOM - Examples

SPANISH

a. *Vi* *la* *casa.*
I.saw the house
'I saw the house.'

b. *Vi* *a* *la* *mujer.*
I.saw ACC the woman
'I saw the woman.'

Haspelmath (2018)

EVENKI uses -***ɓa*** to case-mark definite objects, and -***jə*** for indefinite objects

Bii asii -βa əəri-m.
1SG woman-ACC call-1SG
'I call the woman.' (p. 8)

ǯəβgəə-jə gamii, aja bi-mčə.
food -ACC.INDF take good be-COND
'It would be good to get some (any) food.' (p. 9)

Bulatova & Grenoble 1999: 8-9

BASHKIR

hin *kitap-tï* *uqï-yhïn*
you book-ACC' read-2sg

vs.

hin *kitap* *uqï-yhïn*
you book read-2sg
"You are reading the book/You are reading a (= any, some) book"[47]

Usually, the nominal in patient role is inanimate and indefinite, so deviations from this usual association tend to be accusative-marked.

Haspelmath (2018)

RUSSIAN

ja *vstreča-ju* *dorog-ix* *gost-ej*
I receive-1sg dear-GEN=ACC' pl guest-GEN=ACC' pl

vs.

ja *pokupaj-ju* *dorog-ije* *vešč-i*
I buy-1sg dear-NOM=ACC pl thing-NOM=ACC pl
"I receive dear guests / I buy expensive things"[45]

Bossong (1991)

DOM - Observations

animacy scale:

human noun --> animal noun --> inanimate noun

Universal *(Haspelmath 2018)*
The higher a referential type of noun is on the animacy scale, the more likely it is that it will have a special object marker, and the longer this marker will be.

Different marking of Patience

- Mark a P, high in animacy, i.e. the accusative case is restricted to Ps that are high in animacy

Czech

Viděl jsem	*chlapc-e / ps-a / dub / stůl.*
I saw	the boy (A=Gen) / dog (A=Gen) /oak (A=N) / table (A=N)
'I saw the boy/dog/oak/table'.	

Polish

Widziałem	*chłopc-ów / dziewczyny / psy / dęby / stoły .*
I saw	the boys (A=Gen) / girls(A=N) dog(A=N) /oak (A=N) / table (A=N)
'I saw the boys/girls/dogs/oaks/tables'.	

- mark a P, high in definiteness, i.e. the accusative case is restricted to definite Ps,
- mark an A that is low in animacy, i.e. the ergative case is restricted to NPs that are low in animacy

Different marking of Patience

- mark a P, high in animacy, i.e. the accusative case is restricted to Ps that are high in animacy
- Mark a P, high in definiteness, i.e. the accusative case is restricted to definite Ps

  in Turkish, only definite direct objects take the special accusative suffix *–ı*.

Hasan	*öküz - ü*	*aldı.*	Turkish
Hasan	ox - ACCUSATIVE	bought	
‘Hasan bought the ox’.			
Hasan	*bir öküz*	*aldı.*	
Hasan	a ox	bought	
‘Hasan bought an ox’.			

- mark an A that is low in animacy, i.e. the ergative case is restricted to NPs that are low in animacy

Locative Cases

basic localization	*case*	*combinations in Hungarian*
IN – inside	LOKATIVE=ESSIV E (where, LOC) We got engaged in Bremen.	Inessive
APUD – near		Elative
SUB – under	ABLATIVE=ELATIVE (from where, DIR1) We went to Bamberg.	Illative
SUPER – over		Superessive
POST – behind		Delative
AD – on surface	LATIVE=DIREKTIVE (to where, DIR3) She came from Aachen.	Sublative
CIRKUM – around		Adessive
ULTRA – far from		Ablative
		Allative

Differential Place Marking (DPM)

Maltese

a. *Jgħallem* *Għawdex.*
3SG.M.IMPFV.teach Gozo
'He teaches on Gozo (an island).'

b. *Jgħallem* *f-l-iskejjel* *ta-l-Gvern.*
3SG.M.IMPFV.teach in-DEF-schools of-DEF-government
'He teaches in the schools of the government.'

Martinican Creole (Zribi-Hertz & Jean-Louis 2018)

a. *Mèl-la* *an* *piébwa-a.* (p. 158)
blackbird-DEF in tree-DEF
'The blackbird is in the tree.'

b. *Pòl* *Fòdfrans* (p. 161)
Paul Fort-de-France
'Paul is in Fort-de-France.'

Swahili (Bentley 1998: 188)

a. *A-na-kwenda* *nyumba-ni.*
3sg-PRS-go house-LOC
'He is going home.'

b. *A-na-kwenda* *Dar es Salaam.*
3SG-PRS-go Dar es Salaam
'He is going to Dar es Salaam.'

Modern Eastern Armenian (Creissels & Mounole 2011: 164)

a. *Aprum em* *ays* *pʰoɣoc-um*
living I.am this street-LOC
'I live on this street.'

b. *Aprum em* *Yerevan(-um).*
living I.am Yerevan-(LOC)
'I live in Yerevan.'

Differential Place Marking (DPM)

- In French, street names are systematically zero-marked (Stolz et al. 2014)

a. *On se rencontre dans le parc.*
we REFL meet in the park
'We meet in the parc.'

b. *On se rencontre Rue Molière.*
we REFL meet Rue Molière
'We meet in Rue Molière.'

- Contrasts between shorter and longer forms
  - In all cases, the shorter forms are used for place names and the longer forms are used for common nouns. (Haspelmath, 2018)

2) Latin
a. *in campo* 'in the field'
b. *Roma-e* 'in Rome' (not **in Roma*)

3) Basque (Creissels & Mounole 2011: 168-169)
a. *mendi-tan* 'on the mountain'
b. *Bilbo-n* 'in Bilbao'

Observations on DPM

Universal *(Haspelmath 2018)*
If a language has asymmetric differential coding of place in common nouns and place names, the place-name marker will be shorter.

"If, in a given language, constructions which function as spatial adverbial adjuncts or complements of a given head (noun or verb) differ in terms of their morphosyntactic complexity [measured in terms of the number of units (= words, morphs)], then those constructions which involve a toponym are less complex than those which involve a common noun." (Stolz et al., 2017)

Differential PLACE marking: toponyms ↔ inanimates ↔ humans

- In **Basque**, a special marker ***-ga(n)*** occurs with animate nouns in the locative, ablative and allative cases. Thus, the marking of place relations with human landmarks requires more segments. *(Creissels & Mounole, 2011)*

(16)	'Bilbao'	'the mountain'	'the boy'
locative	*Bilbo-n*	*mendi-an*	*mutila-ga-n*
ablative	*Bilbo-tik*	*mendi-tik*	*mutila-gan-dik*
allative	*Bilbo-ra*	*mendi-ra*	*mutila-gan-a*

- In **Italian**, inanimate nouns (and toponyms) take the allative preposition ***a+***, while animate nouns require ***da+*** (Luraghi 2011: 220).

a. *vado a-lla scuola* / *vado a Parigi*
I.go to-the school / I.go to Paris
'I go to the school.' / 'I go to Paris.'

b. *Vado da-l poliziotto.*
I.go to-the policeman
'I go to the policeman.'

Luraghi (2011) : the marker for human landmarks is unstable and rather different across Romance languages (Latin *apud*, French *chez*, colloquial Spanish *donde*), but always longer than the marker for inanimate landmarks.

Differential Place marking: toponyms ↔ inanimates ↔ humans

- Special marking of human landmarks is even more common than different treatment of place names, but it is not often noted, because we do not expect humans to be landmarks of ordinary spatial relations for semantic reasons.

Finnish (Kittilä et al. 2011)

Kirja	*on*	*pöydä-n*	*päällä* /	*pöydä-llä.*
book	is	table-GEN	on	table-ADE

'The book is on the table.'

Kirja	*on*	*lapse-n*	*päällä* /	**lapse-lla.*
book	is	child-gen	on	child-ADE

'The book is on the child.'

Universal *(Haspelmath 2018)*
If a language has asymmetric differential coding of place in inanimate nouns and human nouns, the inanimate-noun marker will be shorter.

Differential Place marking: toponyms ↔ inanimates ↔ humans

topo-nouns

'(one's) house', 'village', 'school', 'church', 'beach'

- Languages sometimes give special treatment to a diverse set of nouns that denote concepts which are commonly used as spatial landmarks

a. Latin
domi 'at home', *humi* 'on the ground', *ruri* 'in the countryside',
terrae 'on the land'
b. Ancient Greek (Luraghi 2017: 126)
dómōi 'at home', *póntōi* 'on the sea', *agrôi* 'in the field', *khérsōi* 'on the dry land'

- spatial-reference scale

human noun > common inanimate noun > topo-noun > place name

Universal *(Haspelmath 2018)*
The higher a referential type of noun is on the spatial-reference scale, the more likely it is that it will have a place marker, and the longer this marker will be.

Conclusions

- Both differential object marking and differential place marking are special cases of a more general regularity
- It is efficient for a grammatical system to have special and longer grammatical markers for unusual situations. (*Haspelmath, 2018*)

Generalized Universal
Deviations from usual associations of role meanings and properties of referring expressions tend to be coded by longer grammatical forms.

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